

What is claimed is:

1. A stimulating light cut filter which is disposed between a radiation image convertor panel, which emits stimulated emission upon exposure to stimulating light beam,
5 and a detecting means, which detects the stimulated emission emitted from the radiation image convertor panel, to transmit the stimulated emission and cut the stimulating light and comprises

10 an optical element which absorbs the stimulating light,
and

a reflecting layer which reflects the stimulating light.

2. A stimulating light cut filter as defined in Claim 1 in which at least one reflecting layer is disposed in an optical path of the stimulated emission along which the 15 stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in the optical elements of the stimulating light cut filter.

3. A stimulating light cut filter as defined in Claim 1 in which the transmissivity of the optical path of the 20 stimulated emission between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

25 4. A stimulating light cut filter as defined in Claim 1 in which the stimulating light cut filter is provided with

a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the 5 reflecting layer is not higher than 10%, and the transmissivities between adjacent reflecting layers are all 10% or less.

5. A stimulating light cut filter which is disposed between a radiation image convertor panel, which emits 10 stimulated emission upon exposure to stimulating light beam, and a detecting means, which detects the stimulated emission emitted from the radiation image convertor panel, to transmit the stimulated emission and cut the stimulating light and comprises

15 a plurality of optical elements which absorb the stimulating light, and

at least one reflecting layer which reflects the stimulating light.

6. A stimulating light cut filter as defined in Claim 20 5 in which the plurality of optical elements are bonded together by way of the reflecting layer.

7. A stimulating light cut filter as defined in Claim 5 in which at least one reflecting layer is disposed in an optical path of the stimulated emission along which the 25 stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in

the optical elements of the stimulating light cut filter.

8. A stimulating light cut filter as defined in Claim 5 in which the transmissivity of the optical path of the stimulated emission between the position in which the 5 stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

9. A stimulating light cut filter as defined in Claim 10 5 in which the stimulating light cut filter is provided with a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position 15 in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%, and the transmissivities between adjacent reflecting layers are all 10% or less.

10. A radiation image read-out apparatus which is provided with a detecting means detecting stimulated emission 20 emitted from a radiation image convertor panel upon exposure to a line-like stimulating light beam, and reads out a radiation image recorded on the radiation image convertor panel through an imaging optical system, wherein

25 a stimulating light cut filter comprising an optical element which absorbs the stimulating light and a reflecting layer which reflects the stimulating light is disposed between

the radiation image convertor panel and the detecting means to transmit the stimulated emission and cut the stimulating light.

11. A radiation image read-out apparatus as defined in
5 Claim 10 in which at least one reflecting layer of the stimulating light cut filter is disposed in an optical path of the stimulated emission along which the stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in the optical elements of
10 the stimulating light cut filter.

12. A radiation image read-out apparatus as defined in
Claim 10 in which the transmissivity of the optical path of the stimulated emission between the position in which the stimulated emission first impinges upon the stimulating light
15 cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

13. A radiation image read-out apparatus as defined in
Claim 10 in which the stimulating light cut filter is provided
20 with a plurality of the reflecting layers, and the transmissivity between the position in which the stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%, and
25 the transmissivities between adjacent reflecting layers of the stimulating light cut filter are all 10% or less.

14. A radiation image read-out apparatus which is provided with a detecting means detecting stimulated emission emitted from a radiation image convertor panel upon exposure to a line-like stimulating light beam and reads out a radiation 5 image recorded on the radiation image convertor panel through an imaging optical system, wherein

a stimulating light cut filter comprising a plurality of optical elements which absorb the stimulating light and at least one reflecting layer which reflects the stimulating 10 light is disposed between the radiation image convertor panel and the detecting means to transmit the stimulated emission and cut the stimulating light.

15. A radiation image read-out apparatus as defined in Claim 14 in which the plurality of optical elements of the 15 stimulating light cut filter are bonded together by way of the reflecting layer.

16. A radiation image read-out apparatus as defined in Claim 14 in which at least one reflecting layer of the stimulating light cut filter is disposed in an optical path 20 of the stimulated emission along which the stimulated emission propagates behind a face of the optical element upon which the stimulated emission impinges first in the optical elements of the stimulating light cut filter.

17. A radiation image read-out apparatus as defined in 25 Claim 14 in which the transmissivity of the optical path of the stimulated emission between the position in which the

stimulated emission first impinges upon the stimulating light cut filter and the position in which the stimulated emission first impinges upon the reflecting layer is not higher than 10%.

5 18. A radiation image read-out apparatus as defined in
Claim 14 in which the stimulating light cut filter is provided
with a plurality of the reflecting layers, and the
transmissivity between the position in which the stimulated
emission first impinges upon the stimulating light cut filter
10 and the position in which the stimulated emission first
impinges upon the reflecting layer is not higher than 10%, and
the transmissivities between adjacent reflecting layers of the
stimulating light cut filter are all 10% or less.

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